

ABSTRACT

A method of removing a biological contaminant from a mixture containing a biomolecule and the biological contaminant, the method comprising: (a) placing the biomolecule and contaminant mixture in a first solvent stream, the first solvent stream being separated from a second solvent stream by an electrophoretic membrane; (b) selecting a buffer for the first solvent stream having a required pH; (c) applying an electric potential between the two solvent streams causing movement of the biomolecule through the membrane into the second solvent stream while the biological contaminant is substantially retained in the first sample stream, or if entering the membrane, being substantially prevented from entering the second solvent stream; (d) optionally, periodically stopping and reversing the electric potential to cause movement of any biological contaminants having entered the membrane to move back into the first solvent stream, wherein substantially not causing any biomolecules that have entered the second solvent stream to re-enter first solvent stream; and (e) maintaining step (c), and optional step (d) if used, until the second solvent stream contains the desired purity of biomolecule.